

1 is simply irrelevant, unless it can be demonstrated that the identity of the called party
2 *causes* the costs incurred in delivering the call to change (i.e. is a cost driver). No such
3 demonstration has been made in this case.

4 Dr. Harris refers in his testimony to the possibility of an “outright subsidy” being
5 requested by the CLECs and to the existence of a “current subsidy system.” What his
6 testimony fails to make clear is exactly who he asserts is subsidizing whom. It appears
7 that Dr. Harris is asserting that SWBT would be subsidizing, through reciprocal
8 compensation payments, the service provided by a CLEC to an ISP. As with any subsidy
9 claim, there are two components. In this case, they would be: (1) is the service provided
10 by CLECs to ISPs being subsidized?, and (2) would the payment reciprocal compensation
11 for the delivery of calls to ISPs provide such a subsidy? In order for SWBT’s claim to be
12 validated, an affirmative response to each question is necessary. Of course, the first
13 question is moot unless the answer to the second question is yes: as a factual matter,
14 CLECs may or may not subsidize the service provided to ISPs by utilizing revenues from
15 services provided to other customers. The potential harm to SWBT arises only if such a
16 subsidy is funded through charges that it must pay. Otherwise, SWBT should be
17 indifferent.⁸ The salient question, therefore, is whether reciprocal compensation rates
18 (paid by either SWBT or CLECs to the other) *provide* a subsidy. It is a well accepted
19 principle of economics that a service can be shown to be the recipient of a subsidy only if
20 generates revenues less than its incremental cost, and provides a subsidy only if it

8 This indifference should work both ways. CLECs should be willing to pay reciprocal compensation for calls originated by their end user customers that are then delivered by SWBT to called party whose service is being subsidized (an residential subscriber in a rural area, for example).

i generates revenues in excess of its stand-alone cost. In Texas, the established rates for
2 reciprocal compensation are not above stand-alone cost, and in fact are not above
3 incremental cost. The rates are set at the level adopted as TELRIC-compliant by this
4 Commission. It is difficult to understand how a rate that is cost-based (and in fact is set
5 equal to cost) can be seriously held forth as the source of a subsidy. Dr. Harris' argument
6 may have had merit if the Commission had adopted SWBT's proposal to establish
7 reciprocal compensation rates at a level above cost, or if it had accepted SWBT's original
8 overstatement of the cost of the components of reciprocal compensation. Neither of these
9 outcomes took place, however. Instead, the Commission adopted reciprocal
10 compensation rates equal to cost. Such rates cannot, by definition, provide the funding
11 for a subsidy.

12 Dr. Harris goes on in his testimony to advocate the application of the principle of
13 cost causation to the issues in this proceeding. At this level, I agree with his testimony:
14 cost causation is at the heart of the issue. Dr. Harris then goes on (for example at pages 6
15 and 9-15) to construct a novel theory regarding the identity of the cost causer. This
16 theory (and its selective application) are illustrated in Table 1 in his testimony. For a
17 local voice call originated by a customer of LEC A and delivered to a customer of LEC B,
18 Dr. Harris apparently agrees that LEC B has been impacted in a way that would result in
19 the payment of reciprocal compensation from LEC A to LEC B. In this scenario, he
20 properly identifies the cost causer as the customer of LEC A who originates the call (Dr.
21 Harris makes no reference to a local data call, but I can only assume that the same
22 treatment would apply). In other words, when the called party is an entity other than an
23 ISP, Dr. Harris correctly identifies the cost causer – the calling party. When an otherwise

1 identical call is delivered to an ISP as the called party, Dr. Harris asserts that the
2 originating caller (and the LEC that provides it service) is now off the hook, and that the
3 ISP becomes the cost causer. This transformation occurs, according to Dr. Harris,
4 because the ISP is providing the originating caller a service which is accessed via a
5 telephone call. What is strikingly absent from this analysis is the consideration of all
6 other entities who provide a service to consumers that is accessed by a telephone call.
7 According to this logic, calls to banks, brokerage firms, government agencies, restaurant
8 takeout services, and the local psychic hotline should all be exempted from reciprocal
9 compensation.

10 There is no dispute that ISPs are “attractive” destinations for calls, or that they
11 receive a greater than average number of incoming calls. But as the Court correctly
12 pointed out, there has been no demonstration to date that ISPs are fundamentally
13 different, for the purposes of reciprocal compensation, than any other “communications-
14 intensive business end user selling a product to other consumer and business end users.”
15 From the standpoint of the reciprocal compensation-related costs incurred by what Dr.
16 Harris refers to as LEC B, the identity of the called party as an ISP makes no difference
17 whatsoever. The shortcomings of the SWBT position are readily apparent: not only have
18 they not demonstrated that an ISP is fundamentally different from another
19 communications-intensive business, they have not demonstrated that ISPs are
20 fundamentally different from the residence of the local homecoming queen. Simply being
21 an attractive destination for people to call, and/or receiving a greater than average number
22 of calls, does not magically transform the called party into a cost causer.

1 The inescapable facts remain the following: end user customers of SWBT are
2 making the decision to pick up the phone and dial a seven or ten digit number that will
3 provide them with a connection to the called party of their choosing. Sometimes that
4 called party is the customer of a CLEC, and the CLEC receives the call from SWBT,
5 delivers it to the called party, and incurs the cost of doing so. There is no dispute that the
6 SWBT customer may make the call in order to receive a service from the called party (a
7 bank transaction, a stock trade, a horoscope, or access to information found on the
8 Internet). The fact that a called party is providing a service to the calling party does not
9 mean that the calling party's free will has somehow been subverted, however. The costs
10 in question are created when a call is made that requires collaboration between LECs for
11 its completion. There is simply no way for the called party to initiate such a call, and no
12 way for the called party to cause the cost to be incurred.

13
14 Q. IN YOUR DIRECT TESTIMONY, YOU ARGUED THAT THE RESULTS OF THE
15 SWBT-IBT STUDY PROVIDE NO USEFUL INFORMATION TO THE
16 COMMISSION. HAS THE TESTIMONY OF THE SWBT WITNESSES CHANGED
17 YOUR CONCLUSIONS IN THIS REGARD?

18 A. No. In particular, the testimony of Ms. Smith and Dr. Taylor has reinforced my concerns.

19 In my direct testimony, I listed two categories of problems with the SWBT-IBT
20 study, either of which would render its results meaningless for the task at hand. First, the
21 study is conceptually flawed; the methodology used is certainly not TELRIC (as the study
22 is labeled) and in fact is not a valid costing methodology at all. Second, the study is a

1 juxtaposition of data from different (potentially conflicting) sources that ultimately yield
2 costs that are not applicable to either SWBT or CLECs.

3 While the SWBT-IBT violates several TELRIC principles (and the corresponding
4 FCC rules), two of these violations are certain to have a significant impact on the results.

5 First, the stated cost object of the study – the delivery of calls to ISPs by CLECs – is not
6 a network element, and cannot, by definition, be the cost object of a TELRIC study. Dr.
7 Taylor confirms this at pages 11-12 of his deposition: “So the increment of demand is the
8 supply of the element, calculate the costs associated with that change in supply, look at
9 the number of units of the element, divide one by the other and you get a TELRIC.”

10 The second significant violation is that the SWBT-IBT fails to study the total
11 quantity of the element being studied. Dr. Taylor also verifies (p. 14) the application of
12 this total demand assumption (the “T” in TELRIC): “the demand in question is the total
13 demand for the element, including implicitly both retail and wholesale use of the element.
14 So if it’s talking about loops, the volume of demand that’s used in calculating TELRIC is
15 all loops, not just the loops that might be sold to CLECs, for example.” Dr. Taylor’s
16 recollection of the FCC rules is almost right; in fact rule 51.511 explicitly states that the
17 total quantity from both wholesale and retail use of a given element must be included.
18 What SWBT has done when designing the SWBT-IBT study is exactly what Dr. Taylor
19 agrees that it could not do in a TELRIC study: it has studied less than the total quantity of
20 the elements associated with reciprocal compensation, and has in fact studied a subset of
21 the total quantity associated only with the delivery of traffic by CLEC to an ISP. This
22 logical error is identical to the one in Dr. Taylor’s example, in which he stated that the

1 total demand for loops in a TELRIC study could not be “just the loops that might be sold
2 to CLECs.”

3 The reason for the total quantity requirement, as Dr. Taylor correctly points out
4 (pp.15-16), is that “the FCC wanted to be sure that all economies of scale that the ILEC
5 would realize would be included in the price that people who bought these elements
6 would pay.” Dr. Taylor also confirms the point made in my direct testimony that the use
7 of less than a total demand assumption (as in the SWBT-IBT) will impact results in an
8 unpredictable way (this unpredictability makes after-the-fact “corrections” to such a cost
9 study difficult or impossible). At pages 21-22, he states that “you can’t tell a priori which
10 way using less than the total supply would bias the answer, if it would at all. What that
11 depends upon is how marginal cost s the cost of an additional increment changes with the
12 level of output...If marginal cost varies with the level of output, if it gets higher or lower
13 as output increases, then the numbers would differ, but it depends upon whether marginal
14 cost is increasing or decreasing with output as to whether the TELRIC that you calculated
15 from some subset of the total quantity of demand were greater than or less than the
16 TELRIC that you would calculate if you had used all of the demand. The design of the
17 SWBT-IBT creates just such a problem. The Commission cannot know whether the use
18 of a less than total quantity of demand has biased the results of the study upward or
19 downward. Either way, their reliability is diminished. At pages 20-21, Dr. Taylor also
20 agreed that it would not be appropriate to conduct a TELRIC study by considering only
21 the quantity of the element used to provide service to a given class of customers. The
22 SWBT-IBT does just that: it attempts to calculate the TELRIC of the elements of

1 reciprocal compensation by studying only that portion of those elements associated with a
2 specific customer class.

3
4 Q. WHAT, IN ECONOMIC OR COST METHODOLOGY TERMS, DO THE RESULTS
5 OF THE SWBT-IBT CONCEPTUALLY REPRESENT?

6 A. Nothing.

7
8 Q. YOU ALSO STATED THAT THE SWBT-IBT SUFFERS FROM PROBLEMS
9 RELATED TO DESIGN AND IMPLEMENTATION. PLEASE EXPLAIN HOW THE
10 TESTIMONY OF SWBT WITNESSES HAS IMPACTED YOUR CONCLUSIONS IN
11 THIS REGARD.

12 A. Ms. Smith, in her deposition, makes several statements that underscore my concerns
13 regarding how the SWBT-IBT was conducted. One of the underlying assumptions in the
14 SWBT-IBT study is that SWBT has been able to accurately identify traffic delivered to
15 ISPs. The application of this assumption in the study provides an illustrative example of
16 the poor costing practices used by SWBT when conducting this study. When collecting
17 data from multiple sources to be used in a study of this type, it is important to (1) ensure
18 that the collection methods (in this case selection criteria) are consistently applied to each
19 data source, and (2) the collection method should be thoroughly evaluated before use to
20 ensure that it will yield the most accurate input data possible.

21 Ms. Smith, the sponsor of the SWBT-IBT, has made it clear that she has done
22 neither of these tasks. The SWBT-IBT utilizes input data from two sources that
23 separately identify ISPs as the end user to which a call is delivered. The ISP Usage Study

1 (Tab 8 of the SWBT-IBT) is used to determine total "ISP-bound" traffic and the average
2 length of "ISP-bound" calls. The ISP Sample Study, developed through a completely
3 independent process, was used to develop the average busy minutes and messages
4 associated with "ISP-bound" calls. The SWBT-IBT then combines the data from these
5 two sources in a way that assumes that it has been collected in a consistent way (in the
6 simplest terms, it assumes it has apples to combine with apples). In reality, however, the
7 ISP Usage Study and the ISP Sample Study rely on different methods for "identifying" (in
8 reality, guessing at) which end users are ISPs. Undeterred, SWBT has forced the data
9 together in the study.

10 What is more troubling to me as a cost analyst is that as the sponsor of the SWBT-
11 IBT, Ms. Smith had not examined the methods of data collection used by two important
12 components of her study. She states (pp. 42-54) that while she relied on the results of the
13 ISP Sample Study, she does not know how the two sample offices were selected (or
14 whether they are representative of other offices), how the time period for data collection
15 was selected (or whether it was representative of other time periods), or how the traffic
16 bound for ISPs had been "identified." She specifically had not examined whether the
17 selection criteria for identifying ISPs was the same in the ISP Usage Study and the ISP
18 Sample Study, even though the available information strongly suggested that they were in
19 fact different and therefore potentially inconsistent.

20 As a cost analyst, I would have reservations sponsoring a study that relied on data
21 from independent sources that, if my results were to be reliable, would have to be
22 consistent. I would not sponsor such a study if I had not evaluated the data collection
23 methods individually for reasonableness and had not attempted to determine if the

1 approaches were consistent. Ms. Smith apparently has no such trepidation. At pages 60-
2 67, she states that she does not know which methods were used for each data collection
3 effort, does not know how she would evaluate different methods in order to determine
4 which to use, and that she is not bothered by the possibility of inconsistent data sources.
5 When asked, as the sponsor of the SWBT-IBT, whether it troubled her that she didn't
6 know whether data sources underlying her study were consistent, she replied that she had
7 "no opinion on that." If the Commission is being asked to rely on the results of a cost
8 study, it deserves for the sponsor of the study to have an opinion regarding possibility that
9 an important set of inputs to the study (a key factor in the reliability of the results) is in
10 fact invalid.

11
12 Q. IN HIS TESTIMONY, SWBT WITNESS LONG SETS FORTH A THREE-PART TEST
13 TO BE APPLIED WHEN DETERMINING WHETHER TANDEM LEVEL RATES
14 SHOULD BE APPLIED. DO YOU AGREE WITH HIS PROPOSAL?

15 A. No. Mr. Long sets forth a series of arguments in an attempt to support a requirement that
16 in order to receive truly mutual and reciprocal compensation, a CLEC must duplicate the
17 architecture of SWBT's network, including its outdated switching hierarchy. There is no
18 basis for such a requirement in either the FCC rules or sound economics. The
19 development of competition for local exchange service will not be promoted if CLECs
20 are penalized for being more efficient, or if SWBT is rewarded for being less efficient.
21 The reciprocal compensation rate should encourage all LECs to make efficient network
22 deployment decisions.

1 Mr. Long appears to agree with the FCC's conclusion that "[w]here the
2 interconnecting carrier's switch⁹ serves a geographic area comparable to that served by
3 the incumbent LEC's tandem switch the appropriate proxy for the interconnecting
4 carrier's additional costs is the LEC tandem interconnection rate." The FCC is clear that
5 in order to provide a capability equivalent to that provided at the ILEC tandem -- the
6 ability to have calls delivered throughout the geographic area served by that tandem -- a
7 CLEC need not duplicate the ILEC network design. Instead, the CLEC can provide this
8 equivalent capability by utilizing a more efficient network design, and will not be
9 penalized for doing so.

10 Mr. Long does not appear to oppose outright the deployment of a CLEC network
11 that is based on a different design theory that SWBTs (one that does not provide
12 geographic coverage through a physically separated switching hierarchy, but instead
13 provides the geographic coverage with a single switch combined with other facilities, for
14 example). This position is consistent with the conclusion of the FCC, cited by Mr. Long,
15 that CLECs need not deploy multiple switches within a given area in order to receive
16 reciprocal compensation. Inexplicably, Mr. Long goes on to argue that while CLECs
17 need not duplicate the inefficient ILEC network design in order to provide comparable
18 geographic coverage, they must nevertheless do so in order to provide comparable
19 "functionality." There is no basis for such a requirement.

20 Mr. Long hangs his argument on a sentence from paragraph 1090 of the First
21 Report and Order: "states shall also consider whether new technologies (e.g. fiber ring or

9 It is instructive to note that the FCC refers to the CLEC's "switch" rather than to a CLEC's "end office" or
"tandem office" throughout the First report and Order and associated section 51 rules. In doing so, the FCC refers
to the CLEC's switching capability without assuming the existing ILEC switching hierarchy. The FCC makes

1 wireless networks) perform functions *similar* to those performed by an incumbent
2 carrier's tandem switch" (emphasis added). Mr. Long's reliance on this language puts
3 him on shaky ground for three reasons.

4 First, while the cited language refers to "functions similar to those performed by
5 an incumbent carrier's switch, Mr. Long puts forth a proposed requirement (p. 20) that
6 "the CLEC proves that its switch performs the *same functions* on behalf of SWBT that
7 SWBT's tandem switch performs." While Mr. Long would have the Commission believe
8 otherwise, the words "similar" and "same" are not interchangeable.

9 Second, it is clear from the context of the above-cited sentence that the FCC did
10 not intend the word "functions" to have the meaning that Mr. Long suggests. Through
11 interconnection, CLEC's perform an essential functionality for SWBT: the ability, from a
12 single point of interconnection, to have calls delivered to any point within a geographic
13 area comparable to the area served by SWBT's own tandem. There is nothing in the
14 FCC's language that even remotely suggests that it intended to require CLECs to deploy
15 the essential elements of that functionality by using the same equipment as the ILECs; in
16 fact the opposite is true. A CLEC must, though a combination of network facilities
17 (including but not limited to switches and fiber rings) create the ability for SWBT to have
18 calls originated by its customers delivered to the called party within the geographic area
19 in question. There is no requirement, or even the suggestion of a requirement, that the
20 CLEC provide through its switch a set of functions identical to those that SWBT provides
21 through its tandem.

reference to end offices and tandems only in the context of the ILEC networks.

1 Third, and most importantly, it is important to recall that where the legislative
2 intent is unclear, it is OK to look at the plain language of the law. In this case, the
3 applicable FCC rule is clear and requires no further explanation from the language in the
4 Order: [w]here the switch of a carrier other than an incumbent LEC serves a geographic
5 area comparable to the area served by the incumbent LEC's tandem switch, the
6 appropriate rate for the carrier other than the incumbent LEC is the incumbent LEC's
7 interconnection rate" (Rule 51.711 (a) (3)). This rule makes it clear that in order for a
8 CLEC to receive the tandem level interconnection rate, it need only provide to the ILEC
9 the following "functionality": the ability to have calls delivered to a geographic area
10 "comparable to the area served by the incumbent LEC's tandem switch." The CLEC
11 need not make that functionality available in the same manner as the ILEC, either by
12 deploying the same switching hierarchy or by providing the elements of this functionality
13 by using the same equipment as the ILEC.

14
15 Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

16 A. Yes.



D

ATTACHMENT D

BEFORE THE
**PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking on the
Commission's Own Motion into reciprocal
compensation for telephone traffic
transmitted to Internet Services Providers
modems.

R.00-02-005

Direct Testimony

and

Exhibit

of

LEE L. SELWYN

on behalf of

Pac-West Telecomm, Inc.

July 18, 2000




TABLE OF CONTENTS

INTRODUCTION	1
Qualifications	1
Assignment	2
Summary of Testimony	2
INTER-CARRIER COMPENSATION FOR INTERNET-BOUND TRAFFIC	7
A “ <i>sent-paid</i> ” compensation arrangement has traditionally been applied to local telecommunications traffic, and remains the most rational approach to apply to Internet Services Provider (ISP)-bound traffic that is rated as local and subject to local tariff rates.	7
Because ISPs are end users of telecommunications services and are not telecommunications service providers, the compensation arrangements applied to interexchange carriers (IXCs) should not be applied to ISPs.	16
Under the sent-paid framework, explicit reciprocal compensation payments must be made for call termination when traffic flows are significantly out of balance.	23
Under an explicit reciprocal compensation regime, the appropriate compensation for calls terminated by one of two interconnected carriers is entirely independent from the volume of traffic and associated compensation flowing in the reverse direction.	29
ECONOMIC AND TECHNICAL CHARACTERISTICS OF ISP-BOUND CALLS AND OTHER CONCENTRATED INBOUND TRAFFIC	31
Internet Services Provider (ISP)-bound traffic is technically indistinguishable from other in-bound data and voice local traffic, and should not be singled out for discriminatory treatment with respect to how CLCs are compensated for terminating such traffic.	31
Termination of concentrated inbound traffic, including ISP-bound traffic, is more costly in certain respects than termination of dispersed (i.e., POTS-like) inbound traffic.	40

While CLC networks tend to employ a different mix of facilities than ILEC networks, they provide the same functionality for local telecommunications traffic (including ISP-bound calls) as do ILEC networks, including the interexchange carriage of traffic performed by ILECs' tandem switches and shared transport. 43

The appropriate inter-carrier compensation for the termination and transport of ISP-bound local calls, as well as other forms of local traffic, is a symmetric rate based upon the ILEC's prevailing TELRIC cost level, which creates incentives for continual reductions in the costs of call termination services and harms neither ILECs nor end users. 52

The regulatory principles established in this Commission's New Regulatory Framework (NRF) do not permit ex-post adjustments of rates based upon subsequent reductions in cost. 56

Attachment 1: Statement of Qualifications.

Tables

Table 1	Calculation of Potential Impact on Internet Users of Application of Pacific's Intrastate Switched Access Charges to ISP-bound calls.	20
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Figures

Figure 1	Residential Access Lines: Demand for additional residence access lines has grown substantially.	15
Figure 2	Local Usage Line Per Day: Demand for additional residence access lines has grown substantially	16
Figure 3	Routing a call to an ISP is technically identical to routing a call to any other local telephone number (Case 1: ILEC customer calls an ISP served by the ILEC).	33
Figure 4	Routing a call to an ISP is technically identical to routing a call to any other local telephone number (Case 2: ILEC customer calls ISP served by a CLEC).	34

INTRODUCTION

Qualifications

Q. Please state your name, position and business address.

A. My name is Lee L. Selwyn; I am President of Economics and Technology, Inc. ("ETI"). One Washington Mall, Boston, Massachusetts 02108. Economics and Technology, Inc. is a research and consulting firm specializing in telecommunications economics, regulation, management and public policy.

Q. Please summarize your educational background and previous experience in the field of telecommunications regulation and policy.

A. I have prepared a Statement of Qualifications, which is attached hereto as Attachment 1.

Q. Have you previously testified before the California Public Utilities Commission ("commission")?

A. I have participated in numerous other proceedings before the Commission dating back to the mid-1970s; these appearances are also summarized in Attachment 1.

1 **Assignment**
2

3 Q. By whom were you engaged, and what was your assignment in this proceeding?
4

5 A. ETI has been engaged by Pac-West Telecomm, Inc. (Pac-West), to provide expert assistance
6 and analysis with respect to the issues considered in this proceeding. Relative to this direct
7 testimony, Pac-West requested that I undertake an economic and policy analysis of the
8 Factual Issues identified in the Assigned Commissioner's Ruling of May 2, 2000 and
9 prepare testimony responsive to the Commissioner's request for evidence on those issues.
10

11 **Summary of Testimony**
12

13 Q. Please summarize the testimony you are presenting at this time.
14

15 A. The first section of my testimony ("Inter-carrier Compensation for Internet-Bound Traffic")
16 responds to Factual Issues 5-10 (exclusive of Issue 8, which has been deferred) of the
17 Assigned Commissioner's Ruling. In order to reach a proper understanding of the financial
18 implications of ISP-bound traffic for ILECs, CLCs, and their customers, one must first take
19 into account the existing compensation arrangements applied to traditional
20 telecommunications traffic. My testimony explains that local telephone calls in California
21 and elsewhere in the US are nearly always undertaken on a "sent-paid" basis, meaning that
22 the customer who originates the call pays his or her local carrier to get the local call from the
23 point of origin all the way to its intended destination. Most importantly for the purposes of
24 this proceeding, under the "sent-paid" framework, the costs of terminating the call are paid
25 in full by the call originator (to the carrier that originates the call), so that the recipient of the

1 call need not and should not make any additional payments for the termination of that call.

2 When two interconnecting carriers jointly complete a local call, the originating carrier is
3 responsible for remitting a portion of the sent-paid revenue to the carrier that terminates the
4 call. Reciprocal compensation is simply the payments made by the first (originating) carrier
5 to the second (terminating) carrier for its work in completing the call. Despite ILEC
6 arguments to the contrary, there is no compelling economic or policy basis to deviate from
7 the traditional "sent-paid" framework and reciprocal compensation obligations in the case of
8 ISP-bound traffic. Some ILECs have contended that heavy use of dial-up ISP services has
9 been driving up their average per-line local usage and associated costs, but in fact, ILECs
10 have enjoyed strong growth in residential second lines so that the average volume of local
11 usage per line has not materially increased.

12
13 The major alternative to the "sent-paid" approach to inter-carrier compensation is the access
14 charge framework applied to interLATA toll calls. Some ILECs and ILEC-sponsored
15 economists have argued that ISPs are functionally equivalent to interexchange carriers, and
16 urged regulators to allow ILECs to adopt the access charge framework to ISP-bound calls as
17 a substitute for the "sent-paid" framework. However, as the D.C. Circuit Court of Appeals
18 confirmed earlier this year, ISPs are users of telecommunications services, not
19 telecommunications providers like interexchange carriers, and therefore should not be
20 treated any differently in this respect from other businesses subscribing to telephone
21 services. ILEC arguments that an access charge regime is justified by an analysis of cost-
22 causation for ISP-bound calls are equally without merit. Furthermore, if ILECs were
23 allowed to apply their existing intrastate switched access charges to ISP traffic, Internet
24 users would be exposed to potentially vast increases in the rates they pay for dial-up
25 connection to ISPs, as much as \$15.14 per month in Pacific Bell's California service

1 territory.

2 Under the sent-paid framework, when the exchange of traffic between two carriers is
3 roughly equal, carriers may elect a "bill and keep" system, thereby eliminating the need for
4 explicit inter-carrier payments. However, explicit reciprocal compensation payments must
5 be made for call termination when inter-carrier traffic flows are significantly out of balance,
6 in order to ensure that each carrier is properly compensated for the termination work that it
7 performs.

8
9 In California and elsewhere, the ILECs' ability to effectively dictate reciprocal
10 compensation rates in their negotiations with CLCs meant that CLCs faced call termination
11 rates significantly higher than they had originally proposed. As a result, many CLCs have
12 pursued the market for call termination services needed by ISPs and other businesses with
13 high volumes of inbound traffic, frequently leading to unbalanced one-way traffic flows with
14 interconnecting ILECs. However, under a system of explicit reciprocal compensation
15 payments and as long as the ILEC's rates are based upon the ILEC's costs, there is no
16 logical connection between the traffic flow and associated compensation due in one
17 direction, and the traffic flow and compensation that might occur in the reverse direction.
18 Assuming that ISP-bound calls are subject to reciprocal compensation at all, then in each
19 direction, compensation must be paid for the work performed by the terminating carrier C
20 and thus, the volume of traffic that may or may not flow in the reverse direction is irrelevant.

21
22 The second section of my testimony ("*Economic and Technical Characteristics of ISP-bound*
23 *Calls and Other Concentrated Inbound traffic*") responds to Factual Issues 1-4 of the
24 Assigned Commissioner's Ruling. Some ILECs have contended that reciprocal
25 compensation arrangements with CLCs should make a distinction between traffic that is

1 destined for (terminated at) a conventional voice telephone line, and traffic that is terminated
2 to an ISP. In fact, there is no technical difference in the manner by which these two types of
3 traffic are handled in the ILEC's network and by suggesting otherwise, such ILECs are
4 attempting to introduce a market-driven price discrimination based upon the use to which
5 local telephone service is put rather than on the processes by which it is produced or the
6 costs incurred in its production. My testimony explains why such an attempt to create a
7 distinction between "ordinary" and ISP-bound traffic is without economic or technical merit
8 and should be rejected by this Commission. In fact, it is a sheer impossibility for ILECs to
9 accurately identify ISP-bound calls even if a discriminatory pricing regime were to be
10 adopted.

11
12 My testimony also describes and compares the architecture and design of ILEC networks
13 vis-a-vis CLC networks, and explains why a CLC should be considered to be providing the
14 same traffic aggregation function as occurs via an ILEC's tandem switching, despite the fact
15 that the design of CLCs' local networks differs from that used by ILECs such as Pacific.
16 Indeed, not only do CLCs confront costs that are no lower than those of an ILEC, it is
17 reasonable to expect that the significant differences in the structure of these networks
18 accounts for differences in both the structure and the level of the ILECs' and the CLCs'
19 respective costs of processing and terminating local calls. In fact, ILECs including Pacific
20 have submitted studies to the FCC that claim that the concentrated nature of ISP-bound
21 traffic has caused them to incur network investments and costs incremental to their ordinary
22 call termination costs – costs that presumably those CLCs specializing in terminating
23 concentrated inbound traffic must also be incurring.

24
25 Finally, I explain that the appropriate inter-carrier compensation for the termination and

1 transport of ISP-bound local calls, as well as other forms of local traffic, is a symmetric rate
2 based upon the ILEC's prevailing TELRIC cost level, which creates incentives for continual
3 reductions in the costs of call termination services and harms neither ILECs nor end users.
4 These incentives and the positive market developments they engender were expressly
5 recognized by the FCC during its design of the prevailing reciprocal compensation rules for
6 local telecommunications traffic, and are congruent with the regulatory objectives that this
7 Commission articulated during the establishment of the New Regulatory Framework applied
8 to Pacific and GTEC.

1 INTER-CARRIER COMPENSATION FOR INTERNET-BOUND TRAFFIC¹

2
3 **A “sent-paid” compensation arrangement has traditionally been applied to local telecom-**
4 **munications traffic, and remains the most rational approach to apply to Internet Services**
5 **Provider (ISP)-bound traffic that is rated as local and subject to local tariff rates.**
6

7 Q. Dr. Selwyn, what is the traditional practice in California and across the United States
8 generally for compensating local exchange carriers (LECs) for their carriage of local
9 telephone calls?
10

11 A. The almost universal practice in California as well as generally throughout the US is for
12 local calls to be provided on a “sent paid” basis by the local exchange carrier on whose
13 network the call originates. By that I mean that the customer who originates the call pays
14 his or her local carrier to get the local call from the point of origin all the way to its intended
15 destination, which means that the originating carrier is compensated by its customer for local
16 switching at both the originating and terminating ends of the call as well as for transporting
17 the call the entire distance between the originating switch and the terminating switch. Most
18 importantly in the context of this proceeding, the “sent paid” approach means that the calling
19 party pays in full for the *termination* of the call, as well as for its origination, *even if a*
20 *carrier other than the originating (and billing) carrier ultimately terminates the call.*
21

22 The “sent paid” payment arrangements can take many forms, including flat-rated local
23 calling over a wide area; “extended area service” or “extended area calling” plans that have

1. This section of my testimony responds to Factual Issues 5-10 as set forth in the May 2, 2000 Assigned Commissioner’s Ruling. However, I do not address Factual Issue 8, which was set aside for later consideration in the June 26, 2000 ALJ’s Ruling Granting Motion for (continued...)

1 the same effect; flat-rated local calling over a smaller area with some type of message unit or
2 local measured charge for local calls outside that area; flat-rated local calling for a certain
3 number of calls per month, with a per-message or other charge for usage above that level;
4 and even local service with no usage included in the base price at all, with each call subject
5 to a separate local message unit or measured service charge.

6
7 Q. Is the "sent paid" approach used in California today?

8
9 A. Yes, it is. In California, both Pacific Bell and GTEC offer local usage services under a
10 combination of flat and measured rate elements, but in all cases the charges for these
11 services are paid by the customer who originates calls. For example, Pacific's residence
12 customers generally obtain local service under the Company's tariffs for flat-rate or
13 measured rate exchange service. Pacific's Individual Line Flat-Rate Residence Service
14 provides for unlimited outward calling within a defined local calling area, which consists of
15 the customer's home and certain nearby exchanges.² Residence customers may alternatively
16 choose Pacific's Individual Line Measured Rate Residence Service where, for a lower
17 monthly charge than that which applies for flat-rate local service, the customer receives a
18 \$3.00 monthly "allowance" of outgoing local messages,³ and is then charged usage-sensitive
19 rates for each originated call in excess of that allowance.⁴

20
21 Pacific's business customers may subscribe to Individual Line Business Measured Rate

Clarification.

2. See Pacific Bell Schedule CAL P.U.C. A5.

3. Pacific Bell Schedule CAL P.U.C. A5, Sheet 235 (revision 6), Effective November 1, 1999.

4. Pacific Bell Schedule CAL P.U.C. A5, Sheet 234 (revision 7), Effective November 1, 1999.

1 Service under Pacific's local exchange tariff, which does not provide any usage allowance
2 for outgoing local messages.⁵ Pacific does not offer a flat-rate local exchange tariff to
3 business customers in California.

4
5 In some communities, Pacific's local service customers are required to subscribe to
6 mandatory "Expanded Area Service" (EAS), in which one or more additional exchanges are
7 included in the customer's local calling area (where no long distance charges apply) for an
8 additional fixed rate increment which is folded into the applicable monthly exchange rate for
9 that exchange. (Calls placed to all other points within the same LATA are rated as
10 intraLATA toll.) In the principal metropolitan areas of the state, flat- or local measured-rate
11 calling is limited to an area within twelve (12) "rate miles"⁶ of the exchange from which the
12 call is originated. Calls in excess of 12 miles and up to 16 miles are rated as "Zone Usage
13 Measurement" ("ZUM") calls that are considered "local" for jurisdictional purposes and are
14 included within the monthly calling allowance for measured-rate residence service (whereas
15 intraLATA toll charges are not), but which carry toll-like per-minute charges that are higher
16 than the rates applicable for calls within the 12-mile band. Whatever the precise form of
17 local service plan, and whether priced on a flat-rate or usage-sensitive basis, what is
18 common to all of them is that the *originating end user* pays the *originating local carrier* an
19 amount designed to cover the entire cost of getting the call from the origin to its destination.

5. Pacific Bell Schedule CAL P.U.C. A5, Sheet 210.2 (revision 1), Effective March 10, 1998.

6. Distance for call rating purposes is calculated from the basing point of the originating exchange to the basing point of the terminating exchange, using so-called Vertical and Horizontal (V&H) coordinates as specified in National Exchange Carrier Association (NECA) Tariff No. 4. Actual distances from the calling to the called parties' locations may vary, up or down, from these "rate mile" calculations.